

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number:

09/242,657C

Source:

IFW16

Date Processed by STIC:

12/26/2006

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 12/26/2006

PATENT APPLICATION: US/09/242,657C

TIME: 14:52:45

Input Set : A:\Sequence List.txt

Output Set: N:\CRF4\12222006\I242657C.raw

```

3 <110> APPLICANT: JENSEN, PETER RUHDAL
4 HAMMER, KARIN
6 <120> TITLE OF INVENTION: ARTIFICIAL PROMOTER LIBRARIES FOR SELECTED ORGANISMS
7 AND PROMOTERS DERIVED FROM SUCH LIBRARIES
9 <130> FILE REFERENCE: 55411.2
11 <140> CURRENT APPLICATION NUMBER: 09/242,657C
12 <141> CURRENT FILING DATE: 1999-02-19
14 <150> PRIOR APPLICATION NUMBER: DK 886/96
15 <151> PRIOR FILING DATE: 1996-08-23
17 <150> PRIOR APPLICATION NUMBER: PCT/DK97/00342
18 <151> PRIOR FILING DATE: 1997-08-25
20 <160> NUMBER OF SEQ ID NOS: 62
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 100
26 <212> TYPE: DNA
27 <213> ORGANISM: Lactococcus lactis
29 <220> FEATURE:
30 <221> NAME/KEY: modified_base
31 <222> LOCATION: (26)..(30)
32 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
34 <220> FEATURE:
35 <221> NAME/KEY: modified_base
36 <222> LOCATION: (46)..(59)
37 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
39 <220> FEATURE:
40 <221> NAME/KEY: modified_base
41 <222> LOCATION: (70)..(71)
42 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
44 <220> FEATURE:
45 <221> NAME/KEY: modified_base
46 <222> LOCATION: (73)
47 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
49 <400> SEQUENCE: 1
W--> 50 cggggtcctt aagaatatta tgcattnnnnn agtttattct tgacannnnn nnnnnnnnnnt 60
W--> 51 ggtataatan nanagtactg ttaactgcag ctgaattcgg 100
54 <210> SEQ ID NO: 2
55 <211> LENGTH: 113
56 <212> TYPE: DNA
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
62 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 12/26/2006

PATENT APPLICATION: US/09/242,657C

TIME: 14:52:45

Input Set : A:\Sequence List.txt

Output Set: N:\CRF4\12222006\I242657C.raw

```

63 <221> NAME/KEY: modified_base
64 <222> LOCATION: (32)..(40)
65 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
67 <220> FEATURE:
68 <221> NAME/KEY: modified_base
69 <222> LOCATION: (61)..(74)
70 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
72 <220> FEATURE:
73 <221> NAME/KEY: modified_base
74 <222> LOCATION: (85)..(86)
75 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
77 <220> FEATURE:
78 <221> NAME/KEY: modified_base
79 <222> LOCATION: (88)
80 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
82 <400> SEQUENCE: 2
W--> 83 cgggatccaa gcttaatat aattagcact cnnnnnnnnn gagtgcata ttttttgaca 60
W--> 84 nnnnnnnnnn nnnntggat aatannanag tactgcagct gtctagaatt cgg 113
87 <210> SEQ ID NO: 3
88 <211> LENGTH: 199
89 <212> TYPE: DNA
90 <213> ORGANISM: Saccharomyces cerevisiae
92 <220> FEATURE:
93 <221> NAME/KEY: modified_base
94 <222> LOCATION: (17)..(76)
95 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
97 <220> FEATURE:
98 <221> NAME/KEY: modified_base
99 <222> LOCATION: (83)..(121)
100 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
102 <400> SEQUENCE: 3
W--> 103 cagaattcgt gactcannnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
W--> 104 nnnnnnnnnn nnnnnntata aannnnnnnn nnnnnnnnnn nnnnnnnnnn 120
W--> 105 nctcttaagt gcaagtgact gcgaacattt ttttcgtttg ttagaataat tcaagaatcg 180
106 ctaccaatca tggatcccg 199
109 <210> SEQ ID NO: 4
110 <211> LENGTH: 45
111 <212> TYPE: DNA
112 <213> ORGANISM: Pseudomonas putida
114 <220> FEATURE:
115 <221> NAME/KEY: modified_base
116 <222> LOCATION: (1)..(8)
117 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
119 <220> FEATURE:
120 <221> NAME/KEY: modified_base
121 <222> LOCATION: (13)..(31)
122 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
124 <220> FEATURE:
125 <221> NAME/KEY: modified_base

```

RAW SEQUENCE LISTING

DATE: 12/26/2006

PATENT APPLICATION: US/09/242,657C

TIME: 14:52:45

Input Set : A:\Sequence List.txt

Output Set: N:\CRF4\12222006\I242657C.raw

126 <222> LOCATION: (38)..(45)
 127 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
 129 <400> SEQUENCE: 4
 W--> 130 nnnnnnnntt grnnnnnnnn nnnnnnnnn ntatratnnn nnnnn 45
 133 <210> SEQ ID NO: 5
 134 <211> LENGTH: 60
 135 <212> TYPE: DNA
 136 <213> ORGANISM: Lactococcus lactis
 138 <400> SEQUENCE: 5
 139 cataccggag tttattcttg acagttccac ctccgggtga tataatatct cagtactggt 60
 142 <210> SEQ ID NO: 6
 143 <211> LENGTH: 60
 144 <212> TYPE: DNA
 145 <213> ORGANISM: Lactococcus lactis
 147 <400> SEQUENCE: 6
 148 catggcttag tttattcttg acagggtagt atcactgtga tataatagga cagtactggt 60
 151 <210> SEQ ID NO: 7
 152 <211> LENGTH: 59
 153 <212> TYPE: DNA
 154 <213> ORGANISM: Lactococcus lactis
 156 <400> SEQUENCE: 7
 157 cataagtggag tttattcttg acccggacgc cccctttga tataataagt agtactggt 59
 160 <210> SEQ ID NO: 8
 161 <211> LENGTH: 60
 162 <212> TYPE: DNA
 163 <213> ORGANISM: Lactococcus lactis
 165 <400> SEQUENCE: 8
 166 catatacaag tttattcttg aactagtcg gccaaaatga tataatacct gagtactggt 60
 169 <210> SEQ ID NO: 9
 170 <211> LENGTH: 60
 171 <212> TYPE: DNA
 172 <213> ORGANISM: Lactococcus lactis
 174 <400> SEQUENCE: 9
 175 catgctttac tttattcttg acaaaaccac cagcttttgg tataatacgt gagaactggt 60
 178 <210> SEQ ID NO: 10
 179 <211> LENGTH: 60
 180 <212> TYPE: DNA
 181 <213> ORGANISM: Lactococcus lactis
 183 <400> SEQUENCE: 10
 184 catgacggag tttattcttg acacaggtat ggacttatga tataataaaa cagtactggt 60
 187 <210> SEQ ID NO: 11
 188 <211> LENGTH: 60
 189 <212> TYPE: DNA
 190 <213> ORGANISM: Lactococcus lactis
 192 <220> FEATURE:
 193 <221> NAME/KEY: modified_base
 194 <222> LOCATION: (7)
 195 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
 197 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 12/26/2006

PATENT APPLICATION: US/09/242,657C

TIME: 14:52:45

Input Set : A:\Sequence List.txt

Output Set: N:\CRF4\12222006\I242657C.raw

```

198 <221> NAME/KEY: modified_base
199 <222> LOCATION: (13)
200 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
202 <400> SEQUENCE: 11
W--> 203 cattacntag ttnattcttg acagaattac gattcgctgg tataatatat cagtactggt 60
206 <210> SEQ ID NO: 12
207 <211> LENGTH: 58
208 <212> TYPE: DNA
209 <213> ORGANISM: Lactococcus lactis
211 <400> SEQUENCE: 12
212 cattgtgtag tttattcttg acagctatga gtcaatttgg tataataaca gtactcag 58
215 <210> SEQ ID NO: 13
216 <211> LENGTH: 59
217 <212> TYPE: DNA
218 <213> ORGANISM: Lactococcus lactis
220 <400> SEQUENCE: 13
221 cattctggag tttattcttg accgctcagt atgcagtggg ataatagtag agtactggt 59
224 <210> SEQ ID NO: 14
225 <211> LENGTH: 58
226 <212> TYPE: DNA
227 <213> ORGANISM: Lactococcus lactis
229 <400> SEQUENCE: 14
230 cattttgcag tttattcttg acattgtgtg ctccgggtgt ataatactaa gtactggt 58
233 <210> SEQ ID NO: 15
234 <211> LENGTH: 58
235 <212> TYPE: DNA
236 <213> ORGANISM: Lactococcus lactis
238 <400> SEQUENCE: 15
239 catcgcttag tttttcttga caggagggat ccgggttgat ataatagtta gtactggt 58
242 <210> SEQ ID NO: 16
243 <211> LENGTH: 60
244 <212> TYPE: DNA
245 <213> ORGANISM: Lactococcus lactis
247 <400> SEQUENCE: 16
248 catttgctag tttattcttg acatgaagcg tgcctaattg tatattactt gagtactggt 60
251 <210> SEQ ID NO: 17
252 <211> LENGTH: 60
253 <212> TYPE: DNA
254 <213> ORGANISM: Lactococcus lactis
256 <220> FEATURE:
257 <221> NAME/KEY: modified_base
258 <222> LOCATION: (32)
259 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
261 <400> SEQUENCE: 17
W--> 262 catgggtgag tttattcttg acagtgcggc cnggggctga tatcatagca gagtactatt 60
265 <210> SEQ ID NO: 18
266 <211> LENGTH: 59
267 <212> TYPE: DNA
268 <213> ORGANISM: Lactococcus lactis

```

RAW SEQUENCE LISTING

DATE: 12/26/2006

PATENT APPLICATION: US/09/242,657C

TIME: 14:52:45

Input Set : A:\Sequence List.txt

Output Set: N:\CRF4\12222006\I242657C.raw

```

270 <400> SEQUENCE: 18
271 cattaccgag tttattcttg acaccgttta tcgggggtgt ataatactat agtactggt 59
274 <210> SEQ ID NO: 19
275 <211> LENGTH: 60
276 <212> TYPE: DNA
277 <213> ORGANISM: Lactococcus lactis
279 <400> SEQUENCE: 19
280 catgtaggag tttattcttg acagattagt taggggggtgg tataatatct cagtactggt 60
283 <210> SEQ ID NO: 20
284 <211> LENGTH: 60
285 <212> TYPE: DNA
286 <213> ORGANISM: Lactococcus lactis
288 <400> SEQUENCE: 20
289 catgggtaag tttattcttc aactatctg ggcccgatgg tataataagt gactactggt 60
292 <210> SEQ ID NO: 21
293 <211> LENGTH: 59
294 <212> TYPE: DNA
295 <213> ORGANISM: Lactococcus lactis
297 <400> SEQUENCE: 21
298 ctttggcagt ttattcttga catgtagtga gggggctggt ataatcacat agtactggt 59
301 <210> SEQ ID NO: 22
302 <211> LENGTH: 60
303 <212> TYPE: DNA
304 <213> ORGANISM: Lactococcus lactis
306 <400> SEQUENCE: 22
307 cattctacag tttattcttg acattgcact gtccccctgg tataataact atacatgcat 60
310 <210> SEQ ID NO: 23
311 <211> LENGTH: 60
312 <212> TYPE: DNA
313 <213> ORGANISM: Lactococcus lactis
315 <400> SEQUENCE: 23
316 catggggccg tttattcttg acaacggcga gcagacctgg tataataata tagtactggt 60
319 <210> SEQ ID NO: 24
320 <211> LENGTH: 59
321 <212> TYPE: DNA
322 <213> ORGANISM: Lactococcus lactis
324 <400> SEQUENCE: 24
325 catcggttag ttattcttga catctcaggg gggacgtggt ataataactg agtactggt 59
328 <210> SEQ ID NO: 25
329 <211> LENGTH: 60
330 <212> TYPE: DNA
331 <213> ORGANISM: Lactococcus lactis
333 <220> FEATURE:
334 <221> NAME/KEY: modified_base
335 <222> LOCATION: (29)..(30)
336 <223> OTHER INFORMATION: "n" may be a, t, c, g, other or unknown
338 <400> SEQUENCE: 25
W--> 339 catcctgtag tttattcttg acacacgtnn ttagctgtgg tataatagga gagtactggt 60
342 <210> SEQ ID NO: 26

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/26/2006
PATENT APPLICATION: US/09/242,657C TIME: 14:52:46

Input Set : A:\Sequence List.txt
Output Set: N:\CRF4\12222006\I242657C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 26,27,28,29,30,46,47,48,49,50,51,52,53,54,55,56,57,58,59,70
Seq#:1; N Pos. 71,73
Seq#:2; N Pos. 32,33,34,35,36,37,39,39,40,61,62,63,64,65,66,67,68,69,70,71
Seq#:2; N Pos. 72,73,74,85,86,88
Seq#:3; N Pos. 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36
Seq#:3; N Pos. 37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56
Seq#:3; N Pos. 57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76
Seq#:3; N Pos. 83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101
Seq#:3; N Pos. 102,103,104,105,106,107,108,109,110,111,112,113,114,115,116
Seq#:3; N Pos. 117,118,119,120,121
Seq#:4; N Pos. 1,2,3,4,5,6,7,8,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:4; N Pos. 28,29,30,31,38,39,40,41,42,43,44,45
Seq#:11; N Pos. 7,13
Seq#:17; N Pos. 32
Seq#:25; N Pos. 29,30
Seq#:60; N Pos. 16,17,18,19,20,21,22,23,24,25,26,27,28,29,40,41,43
Seq#:61; N Pos. 10,11,12,13,14,15,16,17,18
Seq#:62; N Pos. 10,11,12,13,14,15,16,17,18,39,40,41,42,43,44,45,46,47,48,49
Seq#:62; N Pos. 50,51,52,63,64,66

VERIFICATION SUMMARY

DATE: 12/26/2006

PATENT APPLICATION: US/09/242,657C

TIME: 14:52:46

Input Set : A:\Sequence List.txt

Output Set: N:\CRF4\12222006\I242657C.raw

L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:60
L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:60
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:60
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:120
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
L:726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0
L:756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:60